

ABSTRACT OF THE DISCLOSURE

An artificial-reverberation generating device comprises in one embodiment a convolution engine in association with an impulse-response synthesizer. The impulse-response synthesizer preferably comprises a noise synthesizer and a control means for controlling one or more parameters of the noise synthesizer, the parameters corresponding to adjustable characteristics of the generated reverberation. The noise synthesizer is preferably a pseudo-random number generator, which is multiplied by the output signal of a density generator. The density generator output signal advantageously takes the form of a series of spikes of variable duration and time-interval spacing. The multiplier outputs feed a phase-correlation stage, followed by a time-variant filter stage and a time-variant amplifier stage. The output of the time-variant amplifier stage forms the output of the impulse-response synthesizer and is used to feed impulse-response information to the convolution engine.